

10 CSR 10-6.120 Restriction of Emissions of Lead From Primary Lead Smelter-Refinery Installations

(1) General Provisions.

(A) Application. This rule shall apply to existing installations in Missouri engaged in specific smelting and refining for the production of lead.

(B) Operation and Maintenance of Lead Emissions Control Equipment and Procedures. The owner or operator of any specific lead smelter shall operate and maintain all lead emissions control equipment and perform all procedures as required by this rule.

(C) Methods of Measurement of Lead Emissions.

1. The method of determining the concentration of visible emissions from stack sources shall be as specified in 10 CSR 10-6.030(9).

2. The method of measuring lead in stack gases shall be the sampling method as specified in 10 CSR 10-6.030(12).

3. The method of quantifying the determination of compliance with the emission limitations from stacks in this rule shall be as follows:

A. Three (3)-stack samplings shall be planned to be conducted for any one (1) stack within a twenty-four (24)-hour period in accordance with paragraph (1)(C)2. If this cannot be done due to weather, operating or other preventative conditions that develop during the twenty-four (24)-hour period, then the remaining samplings may be conducted in a reasonable time determined by the director following the twenty-four (24)-hour period;

B. Each stack sample shall have a sampling time of at least one (1) hour;

C. The process(es) producing the emissions to that stack being tested shall be operating at a minimum of ninety percent (90%) of capacity

of the process(es) for the full duration of the samplings; and

- D. The emission rate to be used for compliance determination shall be quantified by using the following formula:

$$E_c = T \text{ avg lbs per hour} \times 24 \text{ hours} = \text{lbs per 24 hours}$$

Where:

E_c = 24-hour emission rate extrapolated from stack sampling results used for compliance determination; and

$T \text{ avg}$ = Summation of hourly emission rates of three (3) stack sampling results, divided by three (3) for the average hourly rate.

4. The method of measuring lead in the ambient atmosphere shall be the reference method as specified in 10 CSR 10-6.040(4)(G).

(D) Operational Malfunction.

1. The owner or operator shall maintain a file which identifies the date and time of any significant malfunction of plant process operations or of emission control equipment which results in increased lead emissions. The file also shall contain a description of any corrective action taken, including the date and time. 10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions shall apply.
2. All of these files relating to operational malfunction shall be retained for a minimum of two (2) years and, upon request, shall be made available to the director.

(2) Provisions Pertaining to Limitations of Lead Emissions from Specific Installations.

(A) Doe Run Primary Lead Smelter-Refinery at Glover, Missouri.

1. This installation shall limit lead emissions into the atmosphere to the allowable amount as shown in Table IA.

Table IA

<u>Stack Names</u>	<u>Emissions Limitation</u>
	(lbs per 24 hours)
Main Ventilation	184.2
Baghouse	125.4
Blast Furnace	82.3

2. Fugitive lead emissions from lead production processes.
 - A. This installation shall limit production of lead from processes that emit lead to the ambient air to the allowable amount as shown in Table IB and Table IC.

Table IB

<u>Process Name</u>	<u>Throughput (tons per calendar quarter)</u>
Sinter Plant-Material across Sinter Machine	202,000
Blast Furnace-Lead Bearing Material	75,000

Table IC

<u>Process Name</u>	<u>Throughput</u> (tons per day)
Sinter Plant-Material across Sinter Machine	3120

- B. Record Keeping. The operator shall keep records of daily process throughput corresponding with the processes in Table IB in subparagraph (2) (A)2.A. These records shall be maintained on-site for at least three (3) years and made available upon request of the director.

- (B) Doe Run Primary Lead Smelter-Refinery in Herculaneum, Missouri. This installation shall limit lead emissions into the atmosphere to the allowable amount as shown in Table II.

Table II

<u>Stack Name</u>	<u>Emissions</u> <u>Limitation¹</u> (lbs per 24 hours)
Main Stack	794.0
Number 7 & 9 Baghouse Stack	56.6
Number 8 Baghouse Stack	8.2

- (C) Doe Run Lead Smelter-Refinery near Buick, Missouri. The following applies to Doe Run's 1998 and ongoing lead producing operations at this installation.

1. Lead emissions from stacks. This installation shall limit lead emissions into the atmosphere to the allowable amount as shown in Table III.

Table III

<u>Stack Name</u>	<u>Emissions</u> <u>Limitation</u> (lbs per 24 hours)
Main Stack	540.0

2. Fugitive lead emissions from lead production processes. This installation shall limit production from processes that emit lead to the ambient air to the allowable amount as shown in Table IV.

Table IV

<u>Process Name</u>	<u>Throughput (tons per day)</u>
Blast Furnace	1000 Charge
Reverb Furnace	360 Charge
Rotary Melt	240 Charge
Refinery	648 Lead Cast

3. Record keeping. The operator shall keep records of daily process throughput corresponding with the processes in Table IV in subparagraph (2)(C)2. of this rule. These records shall be maintained on-site for at least three (3) years and made available upon the request of the director.
- (3) Provisions Pertaining to Limitations of Lead Emissions From Other Than Stacks at All Installations.
- (A) The owner or operator shall control fugitive emissions of lead from all process and area sources at an installation by measures described in a work practice manual identified in subsection (3)(B). It shall be a violation of this rule to fail to adhere to the requirements of these work practices.
 - (B) Work Practice Manual.
 1. The owner or operator shall prepare, submit for approval and then implement a process and area-specific work practice manual that will apply to locations of fugitive lead emissions at the installation.
 2. The manual shall be the method of determining compliance with the provisions of this section. Failure to adhere to the work practices in the

manual shall be a violation of this rule.

3. Any change to the manual proposed by the owner or operator following the initial approval shall be requested in writing to the director. Any proposed change shall demonstrate that the change in the work practice will not lessen the effectiveness of the fugitive emission reductions for the work practice involved. Written approval by the director is required before any change becomes effective in the manual.
4. If the director determines a change in the work practice manual is necessary, the director will notify the owner or operator of that installation. The owner or operator shall revise the manual to reflect these changes and submit the revised manual within thirty (30) days of receipt of notification. These changes shall become effective following written approval of the revised manual by the director.

(C) Record Keeping.

1. The operator shall keep records and files generated by the work practice manual's implementation.
2. The work practice manual shall contain the requirement that records of inspections made by the operator of fugitive emissions control equipment such as hoods, air ducts and exhaust fans be maintained by the operator.
3. Records shall be kept for a minimum of two (2) years at the installation and shall be made available upon request of the director for purposes of determining compliance.

EPA Rulemakings

CFR: 40 C.F.R. 52.1320 (c)

FRM: 67 FR 18497 (04/16/2002)

PRM: 66 FR 63204 (12/05/2001)

State Submission: 08/03/2000 and 01/10/2001

State Final: 10 C.S.R. 10-6 (02/28/2001)

APDB File: MO-126 and MO-170

Description: EPA approved the Doe Run-Herculaneum nonattainment area SIP submission which meets the requirements of section 110 and part D of the CAA and 40 C.F.R. part 51; and EPA also approved the Doe Run-Glover SIP submission showing a change in ownership of the smelter.

[illegible]

CFR: 40 C.F.R. 52.1320 (c)

FRM: 65 FR 62295 (10/18/00)

PRM: 65 FR 62319 (10/18/00)

State Submission: 5/17/00

State Final: 10 C.S.R. 10-6 (11/30/98)

APDB File: MO-148

Description: This revision takes final action to ensure the permanent and enforceable emission reductions by clarifying the emissions limits for the Doe Run Resource Recycling Facility and removes the text which could have allowed this facility to resume operation as a primary smelter.

[illegible]

CFR: 40 C.F.R. 52.1320 (c) (95) (i) (A)

FRM: 62 FR 9970 (3/5/97)

PRM: 60 FR 10000 (8/4/95)

State Submission: 8/13/96

State Proposal: 20 MR 7014 (12/15/95)

State Final: 10 C.S.R. 10-6 (5/31/96)

APDB File: MO-87

Description: The EPA approved the Asarco Glover, Missouri, emission control plan designed to bring the nonattainment area defined by the boundaries of the Liberty and Arcadia Townships located in Iron County into attainment with the national ambient air quality standard for lead. This rulemaking also contains Consent Decree CV596-98CC with Exhibits A, C, D, E, F, and G that are filed in Vol. 2 under Other Regulatory Requirements.

[illegible]

CFR: 40 C.F.R. 52.1320 (c) (89) (i) (A)

FRM: 60 FR 39851 (8/4/95)

PRM: 60 FR 39910 (8/4/95)

State Submission: 7/2/93; 6/30/94; 11/23/94

State Proposal: 19 MR 41 (1/4/94)

State Final: 10 C.S.R. 10-6 (7/29/94)

APDB File: MO-88

Description: The EPA approved a regulation containing provisions which are applicable to the Doe Run Buick lead smelter. This regulation contains two consent orders that are filed in Vol. 2 under Other Regulatory Requirements.

[illegible]

CFR: 40 C.F.R. 52.1320 (c) (87) (i) (A)

FRM: 60 FR 22274 (5/5/95)

PRM: 60 FR 22334 (5/5/95)

State Submission: 7/2/93; 6/30/94; 11/23/94

State Proposal: 19 MR 41 (1/4/94)

State Final: 10 C.S.R. 10-6 (7/29/94)

APDB File: MO-65

Description: The EPA approved a regulation containing provisions which are applicable to the Doe Run Herculaneum lead smelter. This regulation contains three consent orders that are filed in Vol. 2 under Other Regulatory Requirements.

[illegible]

CFR: 40 C.F.R. 52.1320 (c) (79) (i) (B)

FRM: 59 FR 43480 (8/24/94), Correction Notice 60 FR 16806 (4/3/95)

PRM: 57 FR 32191 (7/21/92)

State Submission: 11/20/91

State Proposal: 16 MR 989 (7/1/91)

State Final: 10 C.S.R. 10-6 (8/20/91)

APDB File: MO-100

Description: This revision updates this rule to include the correct reference method specified in 10 C.S.R. 10-6.030.

[illegible]

CFR: 40 C.F.R. 52.1320 (c) (76) (i) (A)

FRM: 57 FR 8077 (3/6/92)

PRM: 56 FR 41500 (8/21/91)

State Submission: 5/8/91

State Proposal: 15 MR 1494 (9/17/90)

State Final: 15 MR 46 (1/2/91)

APDB File: MO-65

Description: The EPA approved a new regulation containing provisions which are applicable to the Doe Run Herculanum lead smelter. The EPA will not make full approval on this rule until the state submits a plan that meets the Part D requirements.

[illegible]

Difference Between the State and EPA-Approved Regulation

None.